

Kato, Linda

From: Greg Meyer <gmeyer@carlsonmccain.com>
Sent: Thursday, October 09, 2014 4:51 AM
To: Kato, Linda
Cc: Kyle Brock (kb@geomap.tv); John Brunini (Johnny.Brunini@butlersnow.com)
Subject: Williston Village Mobile Home Park Wetland Restoration Monitoring Report (2014 - Year One-Post Restoration)
Attachments: Williston Village Mobile Home Park Wetland Restoration Monitoring Report (2014).pdf

Ms. Kato,

Hope you are doing well. On behalf of the Williston Village Mobile Home Park, Carlson McCain, Inc. is pleased to submit the initial Wetland Restoration Monitoring Report for your review.

Please let me know if you have any questions or need additional information.

Have a great day,

Greg Meyer
Wildlife Biologist / Ecologist

Carlson McCain, Inc.
600 South 2nd Street, Suite 105 | Bismarck, ND 58504
Direct 701-595-7004 | Cell 218-779-6585 | Fax 701-255-1477
www.carlsonmccain.com

This message is intended for the individual or entity named above. If you are not the intended recipient, please do not read, copy or disclose this communication to others. Thank you.



ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

October 1, 2014

Mr. John Brunini
Butler Snow
P.O. Box 6010
Ridgeland, MS 39158-6010

Dear Mr. Brunini,

Carlson McCain, Inc. is pleased to submit the Wetland Restoration Monitoring Report Year One (2014) for your review.

Please call me at 701-595-7004 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads 'Greg W. Meyer'.

Greg Meyer, MS
Ecologist

WETLAND RESTORATION MONITORING REPORT YEAR ONE (2014)

U.S. Environmental Protection Agency Project
#CWA-08-2013-0032
Williston Village Mobile Home Park Wetland Restoration
Williston, North Dakota
Project #4789

Prepared for:

Butler Snow
Mr. John Brunini
P.O. Box 6010
Ridgeland, MS 39158-6010

October 1, 2014



600 South 2nd Street, Suite 105
Bismarck, ND 58504
Tel 701-255-1475
Fax 701-255-1477
www.carlsonmccain.com

ENVIRONMENTAL • ENGINEERING • LAND SURVEYING

TABLE OF CONTENTS

1.0	PROJECT OVERVIEW	1
2.0	WETLAND RESTORATION SUCCESS CRITERIA.....	4
2.1	Wetland Hydrology	4
2.2	Hydrophytic Vegetation.....	4
2.3	Noxious Weed Coverage	4
3.0	MONITORING METHODS	2
3.1	Monitoring Methods	2
3.1.1	Photo Points	2
3.1.2	Wetland Vegetation.....	3
3.1.3	Wetland Hydrology	3
3.2	Problem Areas	3
3.3	Monitoring Report	3
4.0	MONITORING RESULTS AND CONCLUSIONS.....	5
5.0	RECOMMENDATIONS	9
6.0	RESTORATION CONTINGENCY MEASURES.....	10
6.1	Vegetation Contingency Measures.....	10
6.2	Wetland Hydrology Contingency Measure	10
7.0	REFERENCES	11

APPENDICES

Appendix A	Figures
Appendix B	U.S. Army Corps of Engineers Wetland Determination Data Forms
Appendix C	Williston Village Mobile Home Park – Wetland Restoration Update 8/4/14

1.0 PROJECT OVERVIEW

Construction of the Williston Village Mobile Home Park (Village) impacted 4.5 wetland acres by filling a former oxbow/meander channel of Camp Creek (Appendix A). Camp Creek flows east through the northern portion of the Village property toward the Little Muddy River. Fill was placed into the former oxbow/meander channel during construction activities. Restoration activities of the impacted wetland area were completed in November 2013. This monitoring report provides an update on the restoration activities and condition of the restored wetland area.

The wetland is located on the north edge of the Village property near Williston, North Dakota, in the NE¼ of Section 24, T155N, R101W (Appendix A). Additional details of the wetland restoration can be found in the “Williston Village RV Resort Wetland Restoration Plan” dated September 7, 2013.

The anticipated schedule of the restoration activities were:

- Construction staking / Implementation of erosion control structures – September 30, 2013
- Commence removal of fill materials - September 30, 2013
- Completion of final grading and removal of fill materials -November 13, 2013
- Completion and submittal of “As-built plans” -November 13, 2013
- Seeding of restored wetland – prior to November 15, 2013
- Seeding of graded slopes adjacent to restored wetland – Spring 2014 (between May 1 and June 15)
- Biannual Monitoring – June and August 2014 and 2015 (subsequent reports submitted within 45 days of monitoring effort)
- Annual Monitoring – August 2016 – 2018 (if necessary), (subsequent report submitted within 45 days of monitoring effort)

Restoration activities including restoration of the wetland, final grading of the wetland side-slope, and implementation of the erosion control structures (silt fence and straw wattles) were completed in early November 2013 per the U.S. Environmental Protection Agency (EPA) approved Williston Village Wetland Restoration Plan #CWA-08-2013-0032. The final step of the wetland restoration activities included removing the last of the fill materials which allowed the wetland area to be flooded by water that had been previously backed-up by those materials. This was completed before the wetland area could be seeded due to cold temperatures and the unavailability of appropriate seed. Similar inclement weather and the unavailability of the appropriate seed has further delayed the seeding of the restored wetland area.

Inclement weather during the specified planting dates of the side-slopes has caused a delay of their planting until next spring (per the specified dates) in order to aid the success of the seeding effort.

A monitoring visit was conducted on September 11, 2014 by Greg Meyer, Ecologist, of Carlson McCain, Inc. to ascertain how the restored wetland is functioning and to evaluate noxious weeds and problem areas. This monitoring visit was conducted near the end of the 2014 growing season. An earlier formal monitoring visit was not conducted due to restored wetland and side-slopes not being planted.

2.0 MONITORING METHODS

The restored wetland requires subsequent monitoring of its hydrology and vegetation to ensure it is functioning correctly. The restored wetland will be evaluated with wetland criteria as identified in the *Great Plains Regional Supplement to the 1987 Manual (Version 2.0)* (USACE 2010) and *National Wetland Plant List* (Lichvar 2014).

Monitoring of the restoration site will be conducted for five years but may be terminated prior if the EPA deems the restoration successful.

2.1 Monitoring Methods

Monitoring of the restored wetland will consist of a field visit, a monitoring report, and follow-up to any questions or suggestions from regulatory personnel. Monitoring will be performed midway and near the end of the first and second growing seasons following removal of the fill materials. Subsequent monitoring will be conducted on an annual basis during the month of August. The restored wetland will be evaluated by the presence of indicators of wetland criteria, i.e., hydrology, and hydrophytic vegetation (hydric soils are already present) at representative observation points located along a sampling transect. The spatial location of the observation points and the photo points will be collected during the initial monitoring effort with a GPS to ensure that the same locations are evaluated during subsequent monitoring visits.

2.1.1 Photo Points

Photo points are a specified location in which field photographs will be taken. Photographs taken from a specified location and consistent direction will provide a visual account of the restoration and development of the restored wetland.

Photo points will be established in strategic locations in order to document the changes occurring within the restored wetland. The proposed locations and directions of the photo points can be seen in (Appendix A). The photo points will be marked with a metal stake and the spatial locations will be collected with a GPS. Photographs taken from these locations will have consistent camera settings and a documented viewing direction. Photo identification cards with pertinent information to the photo point will be placed in the photograph's field of view. Information documented on the photo identification card will include:

- Unique photo point identification
- Photographer's initials
- Date and time
- Magnetic declination
- Location

2.1.2 Wetland Vegetation

Wetland vegetation composition will be evaluated at each observation point following the guidelines set forth by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (USACE 2010). Vegetation species nomenclature is based on *National Wetland Plant List* (Lichvar 2014). Areal cover of all vegetation species and percent bare soil will be evaluated within a 1 meter squared quadrat at each observation point. An overall vegetation species list of the restored wetland will be compiled with species noted at the observation points and those observed while traversing between them. The restored wetland will be surveyed for the presence of noxious weeds. The adjacent seeded slopes will be evaluated for the presence of noxious weeds and overall presence/growth of the seeded species.

2.1.3 Wetland Hydrology

Wetland hydrology indicators will be evaluated at each observation point following the guidelines set forth by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (USACE 2010). Hydrology indicators will also be identified while traversing between observation points.

2.2 Problem Areas

Problem areas will be identified and documented during the monitoring visits. Photographs and notes detailing each problem area will be collected during the field monitoring. Problem areas may involve erosion, areas barren of vegetation, patches of noxious weeds, etc.

2.3 Monitoring Report

Monitoring reports will be completed after each monitoring visit and submitted. Each report will describe the environmental conditions at the site and assess the relative success or failure of restoration efforts. The report will include:

- Name and contact information of permittee, point of contact, and field observer(s)
- Name of person conducting monitoring reports and dates of monitoring visits
- Directions to and map of mitigation area
- Summary paragraph describing the project's purpose, environmental conditions at the site, and restoration action
- Timeline of restoration activities and final date of completion
- Photographs and a narrative summary of the restored wetland's relative success or failure per success criteria
- Photographs and descriptions of any problem areas
- Recommendations for corrective or remedial actions (if necessary)
- Description and dates of implemented corrective actions (if applicable)

3.0 WETLAND RESTORATION SUCCESS CRITERIA

Success criteria variables are essential to evaluating the restored wetland. The success of the restored wetland will be based on the re-establishment of hydrology and hydrophytic vegetation and the management of noxious weeds.

3.1 Wetland Hydrology

Wetland hydrology will be restored following the removal of the fill materials. Indications of hydrology observed during the monitoring visits will indicate success for the restored wetland. Indications of hydrology will also be compared to adjacent wetlands.

3.2 Hydrophytic Vegetation

Hydrophytic vegetation will be deemed successful when these species comprise greater than 50 percent of areal coverage and be considered dominant species within the observation points. The percent of bare soil will also decrease as vegetation is re-established. Percent bare soil should be considered successful when it comprises less than 15 percent of areal cover.

3.3 Noxious Weed Coverage

Noxious weeds in and around the restored wetland will be evaluated and overall coverage will be determined. Management of noxious weeds will be implemented by request if restoration success criteria goals are not met. Noxious weed coverage should be considered successful when it comprises less than 10 percent of areal coverage.

4.0 MONITORING RESULTS AND CONCLUSIONS

Overall the restored wetland area is progressing and beginning to function properly even though it hasn't been seeded yet. Hydrophytic vegetation species comprise approximately 39 percent areal canopy coverage within the restored wetland. Russian thistle (*Salsola kali*) and other upland weedy species comprises approximately 33 percent areal canopy coverage and the remaining 28 percent consists of bare soils. Prevalent hydrophytic vegetation species consist of foxtail barley (*Hordeum jubatum*), cattails (*Typha angustifolia*), dock (*Rumex crispus* and *mexicanus*), red saltwort (*Salicornia rubra*), and annual seepweed (*Suaeda linearis*). Minor hydrophytic vegetation species consists of Baltic rush (*Juncus balticus*), three-square bulrush (*Schoenoplectus pungens*), and Nuttall's alkaligrass (*Puccinellia nuttalliana*). Large patches of hydrophytic vegetation are present throughout the restored wetland area including along the base of the southern side-slope. This area contained surface water and dense patches of cattails and bulrush.

Upland vegetation species were identified within the restored wetland area. Prevalent species included Russian thistle (*Salsola kali*) and mapleleaf goosefoot (*Chenopodium simplex*). These two weedy species quickly grow in exposed and disturbed areas.

Bare soil is prevalent within the restored wetland area but only one large bare area (5 foot x 5 foot) was noted during the monitoring visit.

The areal coverage of hydrophytic vegetation and bare soil are currently near their success criteria (>50 percent and <15%, respectively) and will approach and surpass their success criteria in subsequent years.

Two photo points were established during the monitoring visit. The photo points overlook the restored wetland area and provide a visual account of the conditions of the restored wetland. One photo point faces west and the other north.



Photograph 1. September 2014 view of restored wetland area. Photograph taken facing west. Natural re-vegetation has taken place within the restored wetland area. Hydrophytic vegetation species comprise approximately 39 percent areal canopy cover while upland species comprise approximately 33 percent areal canopy cover, and bare soil comprises the rest. Patches of cattails along of inundation and saturated soils are present along the base of the southern side-slope near the orange silt fence (foreground). Russian thistle comprises the dark green vegetation in the center of the wetland area. The red vegetation along the western edge of the restored wetland area is comprised primarily of red saltwort.



Photograph 2. September 2014 view of restored wetland area. Photograph taken facing north. A large patch of cattails is located at the base of the side-slope along the orange silt fence. Russian thistle is prevalent across the majority of the restored wetland. The area contains high salinity and areas of high salt concentrations were observed (white patches)

Very few noxious weeds were observed within or near to the restored wetland area. Noxious weeds were estimated to comprise less than one percent of total areal canopy coverage. This surpasses the restoration success criteria for noxious weed coverage.

Indicators of hydrology were identified throughout the wetland area. These indicators included surface water and saturated soils (along base of southern side-slope), salt crust, and surface cracks. Each observation point contained an indicator of hydrology. Photographs taken earlier in the summer also indicated hydrology within the wetland area (Appendix C).

Only one small area of erosion was noted within and around the restored wetland area. A small amount of sediment had knocked down the silt fence. An additional area of silt fence had been erected at this spot to minimize any other erosion prior to the monitoring visit. The straw wattles placed along the side-slopes have significantly reduced erosion along the slopes even though they haven't been planted. The side-slopes are anticipated to be planted next spring during the specified planting dates (May 1-June 15).



Photograph 3. View of eroded area and additional silt fence.



Photograph 4. Straw wattles along the side-slopes. Russian thistle covered the side-slopes throughout the summer but was sprayed with herbicide to control them and prepare the area for seeding. These slopes will be seeded next spring during the specified planting dates (May 1-June 15).

5.0 RECOMMENDATIONS

Overall the wetland restoration is progressing successfully. Natural re-vegetation of the restored wetland area is occurring and will continue with sufficient hydrology. Hopefully Camp Creek will flood the restored wetland area next spring as this will accelerate the development of the restoration.

Recommended measures to ensure restoration success includes:

- Maintain the silt fence along the base of the southern side-slope.
- Plant side-slopes with specified seed mixture in the spring of 2015 (Carlson McCain, 2013).

6.0 RESTORATION CONTINGENCY MEASURES

Village anticipates that the success criteria variables will be met with the proposed restoration of the wetland. However, contingency measures may be necessary to correct unforeseen problems and provide remedial actions for the restored wetland. Village will be responsible to provide remedial actions.

Contingencies are based on the success criteria variables of the monitoring plan and provide methods to correct potential problems. Potential situations and contingencies are described below. Not all future problems can be foreseen; therefore, additional contingencies may need to be developed and implemented to remediate the situation. Prior to any contingency measure being implemented, an evaluation of the situation and consultation and coordination with the EPA will take place to determine the appropriate course of action.

6.1 Vegetation Contingency Measures

Contingency measures for wetland vegetation may involve the following actions:

- Physical control (i.e., mowing, haying, or grazing after the nesting season)
- Reseeding
- Additional seeding

Physical control methods will be implemented if the vegetation success criteria variables are not met during the monitoring period.

6.2 Wetland Hydrology Contingency Measure

Contingency measures for wetland hydrology may involve the following actions:

- Additional removal of fill materials
- Removal of sedimentation or erosion materials

This action will be implemented if the wetland hydrology success criteria variable is not met during the monitoring period. Hydrologic conditions will be compared with nearby wetlands of similar size and class.

No contingency measures are needed to be implemented at this time. Additional monitoring is necessary to evaluate whether the implementation of contingency measures is necessary.

7.0 REFERENCES

Carlson McCain, Inc. 2013. *Williston Village RV Resort Wetland Restoration Plan*. 26 pages.

Environmental Laboratory. 1987. *Corp of Engineers Wetlands Delineation Manual*. Wetlands Research Program. Technical Report Y-87-1. Department of the Army, Waterways Experiment Station, US Army Corp of Engineers, Vicksburg, Mississippi, USA.

Environmental Laboratory. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)*. U.S. Army Corps of Engineers, U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi, USA.

Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. *The National Wetland Plant List: 2014 Update of Wetland Ratings*. Phytoneuron 2014-41: 1-42.

USDA-NRCS. 2014. USDA-NRCS PLANTS database.

http://plants.usda.gov/java/county?state_name=North_Dakota&statefips=38&symbol=JUAR2
Accessed September 2014.

Appendix A

Figures

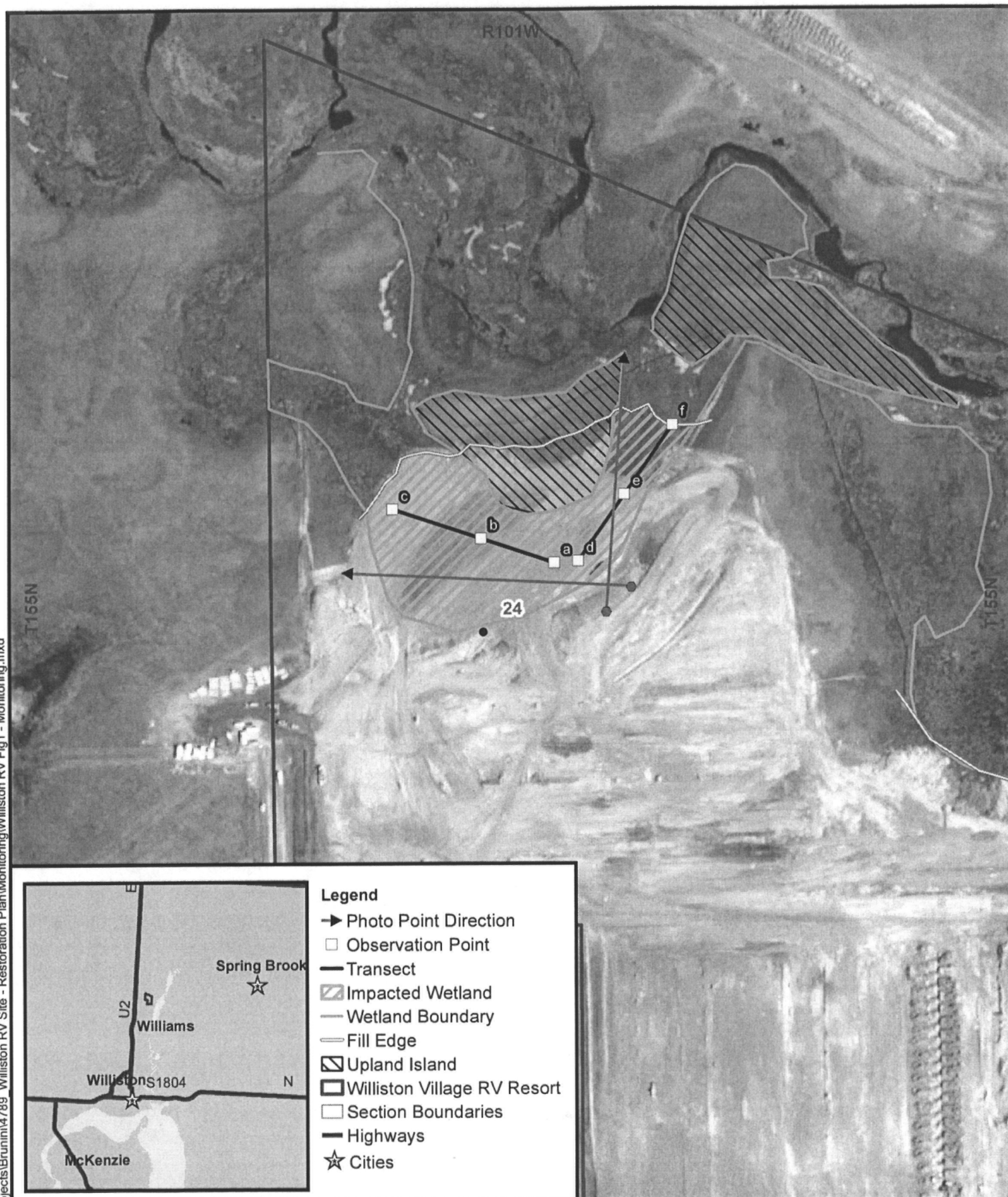


Figure 1
Wetland Monitoring
Section 24, T155N, R101W
Williston Village RV Resort

Appendix B

U.S. Army Corps of Engineers Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: a
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillslope, terrace, etc.): restored drainageway wetland Local relief (concave, convex, none): concave Slope (%): ≤1
 Subregion (LRR): E Lat: 48.236179 Long: -103.609528 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampling Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)																																
1. _____	_____	_____	_____																																	
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
			= Total Cover	Prevalence Index worksheet: <table border="0"> <tr> <td colspan="2"><u>Total % Cover of:</u></td> <td colspan="2"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species</td> <td><u>40</u></td> <td>x1 =</td> <td><u>40</u></td> </tr> <tr> <td>FACW species</td> <td><u>10</u></td> <td>x2 =</td> <td><u>20</u></td> </tr> <tr> <td>FAC species</td> <td>_____</td> <td>x3 =</td> <td>_____</td> </tr> <tr> <td>FACU species</td> <td><u>50</u></td> <td>x4 =</td> <td><u>200</u></td> </tr> <tr> <td>UPL species</td> <td>_____</td> <td>x5 =</td> <td>_____</td> </tr> <tr> <td colspan="2">Column Totals:</td> <td><u>100</u> (A)</td> <td><u>260</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>2.6</u></td> </tr> </table>	<u>Total % Cover of:</u>		<u>Multiply by:</u>		OBL species	<u>40</u>	x1 =	<u>40</u>	FACW species	<u>10</u>	x2 =	<u>20</u>	FAC species	_____	x3 =	_____	FACU species	<u>50</u>	x4 =	<u>200</u>	UPL species	_____	x5 =	_____	Column Totals:		<u>100</u> (A)	<u>260</u> (B)	Prevalence Index = B/A = <u>2.6</u>			
<u>Total % Cover of:</u>		<u>Multiply by:</u>																																		
OBL species	<u>40</u>	x1 =	<u>40</u>																																	
FACW species	<u>10</u>	x2 =	<u>20</u>																																	
FAC species	_____	x3 =	_____																																	
FACU species	<u>50</u>	x4 =	<u>200</u>																																	
UPL species	_____	x5 =	_____																																	
Column Totals:		<u>100</u> (A)	<u>260</u> (B)																																	
Prevalence Index = B/A = <u>2.6</u>																																				
Sapling/Shrub Stratum (Plot Size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover																																				
Herb Stratum (Plot Size: <u>5ft</u>) 1. <u>Hordeum jubatum</u> <u>10</u> <u>no</u> <u>FACW</u> 2. <u>Puccinellia nuttalliana</u> <u>40</u> <u>yes</u> <u>OBL</u> 3. <u>Chenopodium simplex</u> <u>50</u> <u>yes</u> <u>NI</u> 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover																																				
Woody Vine Stratum (Plot Size: _____) 1. _____ 2. _____ _____ = Total Cover																																				
% Bare Ground in Herb Stratum <u>0</u>																																				

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2)(LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> High Plains Depressions (F16) |
| (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF 12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| (where tilled) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: b
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillslope, terrace, etc.): restored drainageway wetland Local relief (concave, convex, none): concave Slope (%): ≤1
 Subregion (LRR): E Lat: 48.236344 Long: -103.610222 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampling Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
			= Total Cover	Prevalence Index worksheet: <table border="0"> <tr> <td><u>Total % Cover of:</u></td> <td><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
<u>Total % Cover of:</u>	<u>Multiply by:</u>																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot Size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
			= Total Cover																	
Herb Stratum (Plot Size: 5')																				
1. <u>Salicornia rubra</u>	<u>50</u>	<u>yes</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 – Rapid Test for Hydrophytic Vegetation <u>X</u> 2 – Dominance Test is >50% _____ 3 – Prevalence Index is ≤3.0 ¹ _____ 4 – Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
			= Total Cover																	
Woody Vine Stratum (Plot Size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
			= Total Cover																	
% Bare Ground in Herb Stratum <u>50</u>																				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				
Remarks:																				

SOIL

Sampling Point: b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2)(LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> High Plains Depressions (F16) |
| (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF 12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input checked="" type="checkbox"/> Surface-Soil Cracks (B6) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| (where tilled) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (Inches): _____Water Table Present? Yes ☐ No ☒ Depth (Inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (Inches): _____Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: c
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillslope, terrace, etc.): restored drainageway wetland Local relief (concave, convex, none): concave Slope (%): ≤1
 Subregion (LRR): E Lat: 48.238543 Long: -103.611061 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
= Total Cover																				
Sapling/Shrub Stratum (Plot Size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
= Total Cover																				
Herb Stratum (Plot Size: 5')																				
1. <u>Salicornia rubra</u>	<u>50</u>	<u>yes</u>	<u>OBL</u>																	
2. <u>Puccinellia nuttalliana</u>	<u>20</u>	<u>yes</u>	<u>OBL</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
= Total Cover																				
Woody Vine Stratum (Plot Size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
= Total Cover																				
% Bare Ground in Herb Stratum <u>30</u>																				
Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 – Dominance Test is >50% _____ 3 – Prevalence Index is ≤3.0 ¹ _____ 4 – Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				

Remarks:

SOIL

Sampling Point: c

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2)(LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> High Plains Depressions (F16) |
| (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF 12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| (where tilled) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: d
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillislope, terrace, etc.): restored drainageway wetland Local relief (concave, convex, none): concave Slope (%): <1
 Subregion (LRR): E Lat: 48.236188 Long: -103.809301 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Is the Sampling Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
4. _____	_____	_____	_____		
		= Total Cover			
Sapling/Shrub Stratum (Plot Size: _____)				Prevalence Index worksheet:	
1. _____	_____	_____	_____	Total % Cover of:	Multiply by:
2. _____	_____	_____	_____	OBL species	x1 = _____
3. _____	_____	_____	_____	FACW species	x2 = _____
4. _____	_____	_____	_____	FAC species	x3 = _____
5. _____	_____	_____	_____	FACU species	x4 = _____
		= Total Cover		UPL species	x5 = _____
Herb Stratum (Plot Size: 5')				Column Totals:	(A) _____ (B) _____
1. <u>Hordeum jubatum</u>	<u>10</u>	<u>no</u>	<u>FACW</u>	Prevalence Index = B/A = _____	
2. <u>Sagolla kali</u>	<u>70</u>	<u>yes</u>	<u>FACU</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
	<u>80</u>	= Total Cover			
Woody Vine Stratum (Plot Size: _____)				Hydrophytic Vegetation Indicators:	
1. _____	_____	_____	_____	1 – Rapid Test for Hydrophytic Vegetation	
2. _____	_____	_____	_____	2 - Dominance Test is >50%	
		= Total Cover		3 – Prevalence Index is ≤3.0 ¹	
% Bare Ground in Herb Stratum <u>25</u>				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
Remarks:				Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks:

SOIL

Sampling Point: d

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2) (LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> High Plains Depressions (F16) |
| (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF 12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| (where tilled) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: e
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillslope, terrace, etc.): restored drainageway wetland Local relief (concave, convex, none): concave Slope (%): ≤1
 Subregion (LRR): E Lat: 48.236609 Long: -103.608843 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Is the Sampling Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
= Total Cover				
Sapling/Shrub Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species _____ x3 = _____ FACU species _____ x4 = _____ UPL species _____ x5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
= Total Cover				
Herb Stratum (Plot Size: 5')				
1. <u>Chenopodium simplex</u>	<u>40</u>	<u>yes</u>	<u>NI</u>	Hydrophytic Vegetation Indicators: _____ 1 – Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 – Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Salsola kali</u>	<u>25</u>	<u>yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
= Total Cover				
Woody Vine Stratum (Plot Size: _____)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
= Total Cover				
% Bare Ground in Herb Stratum <u>35</u>				

Remarks:

SOIL

Sampling Point: e

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR F) <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2) (LRR G, H) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> High Plains Depressions (F16) (MLRA 72 & 73 of LRR H)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) <input type="checkbox"/> Dark Surface (S7) (LRR G) <input type="checkbox"/> High Plains Depressions (F16) (LRR H outside of MLRA 72 & 73) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF 12) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrosphytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) (where not tilled) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)
--	---	---

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project Site: Williston Village RV Resort City/County: Williams Sampling Date: 9/11/14
 Applicant/Owner: Carlson McCain State: ND Sampling Point: f
 Investigator(s): Greg Meyer Section, Township, Range: 24-T155N-R101W
 Landform (hillslope, terrace, etc.): restored drainage way wetland Local relief (concave, convex, none): concave Slope (%): ≤1
 Subregion (LRR): E Lat: 48.236609 Long: -103.608843 Datum: NAD 83
 Soil Map Unit Name: 2270 - Harriet and Stirum Soils 0-2% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	is the Sampling Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: Monitoring observation point of restored wetland area.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot Size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)
4. _____	_____	_____	_____		
			= Total Cover		
Sapling/Shrub Stratum (Plot Size: _____)					
1. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x1 = _____ FACW species _____ x2 = _____ FAC species _____ x3 = _____ FACU species _____ x4 = _____ UPL species _____ x5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
			= Total Cover		
Herb Stratum (Plot Size: 5')					
1. <u>Hordeum jubatum</u>	<u>50</u>	<u>yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 – Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 – Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u>Puccinellia nuttalliana</u>	<u>15</u>	<u>no</u>	<u>OBL</u>		
3. <u>Salicornia rubra</u>	<u>20</u>	<u>yes</u>	<u>OBL</u>		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
			<u>85</u> = Total Cover		
Woody Vine Stratum (Plot Size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
2. _____	_____	_____	_____		
			= Total Cover		
% Bare Ground in Herb Stratum <u>15</u>					
Remarks:					

SOIL

Sampling Point: f

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 CM Mucky Peat or Peat (S2)(LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> High Plains Depressions (F16) |
| (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF 12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes ☐ No ☐

Remarks:

Soils not evaluated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input checked="" type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| (where tilled) |
| <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix C

Williston Village Mobile Home Park – Wetland Restoration Update 8/4/14

BUTLER | SNOW

August 4, 2014

Ms. Linda Kato
US Environmental Protection Agency – Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Williston Village Mobile Home Park Wetland Restoration
Docket No. CWA-08-2013-0032

Dear Ms. Kato,

Please consider this letter as an update of activities concerning the restoration of the wetland within the Williston Village Mobile Home Park, Docket No. CWA-08-2013-0032.

Restoration activities including restoration of the wetland, final grading of the wetland side-slopes, and implementation of erosion control structures (silt fence and straw wattles) was completed in early November 2013. The final step of the wetland restoration activities included removing the last of the fill materials which allowed the wetland to be flooded with water that had been previously backed-up by those materials. This was completed last fall before the restored wetland area was unable to be seeded due to cold temperatures and the unavailability of appropriate seed. The extreme cold winter and spring, dry summer, and the continued unavailability of the appropriate seed has resulted in our inability to seed the wetland area yet. However, the site is naturally re-vegetating itself as seen in the attached photographs.

According to our environmental consultants on this project, Carlson McCain, Inc., natural re-vegetation of restored wetland areas is to be expected and Carlson McCain has encountered this circumstance with numerous U.S. Army Corps of Engineers wetland mitigation projects. In fact, according to Carlson McCain, most of its wetland mitigation projects do not call for seeding a restored wetland area, but rather allow for natural re-vegetation. Further complicating our efforts on this project is our continued inability to locate seed mixes of the three primary species found in the adjacent wetland areas: Nuttall's alkaligrass (*Puccinellia nuttalliana*), foxtail barley (*Hordeum jubatum*), or inland saltgrass (*Distichlis spicata*). The only alkaligrass seed available is Fultz alkaligrass, but it is an introduced species and Carlson McCain has advised that we not seed it in the wetland area as it could spread into Camp Creek.

Post Office Box 6010
Ridgeland, MS 39158-6010

JOHN A. BRUNINI
601-985-4447
john.brunini@butlersnow.com

Suite 1400
1020 Highland Colony Parkway
Ridgeland, MS 39157

T 601.948.5711 • F 601.985.4500 • www.butlersnow.com

BUTLER SNOW LLP

BUTLER | SNOW

At this time, we believe that seeding the restored wetland area will be unnecessary as it will re-vegetate naturally from the adjacent wetland areas. If EPA disagrees and believes that seeding the wetland area is necessary, prairie cordgrass (*Spartina pectinata*), would be a good candidate species. Prairie cordgrass is a common wetland species of the geographic area, can handle high concentrations of salinity (present in the wetland area), and is prevalent upstream of the project.

The side-slopes in the restored area have also not been seeded due to the extreme winter and spring and dry summer. Conditions remained unfavorable during the entire period of specified planting dates for the appropriate seed mixes, so we have decided to wait until next spring (per the dates listed in the restoration plan) in order to aid the success of the seeding effort. The side slopes at the site will be hydro-seeded next spring (2015) during the appropriate dates. Weedy vegetation, primarily Russian thistle (*Salsola kali*), has flourished along the side-slopes and is currently providing ground cover that aids in erosion control (see attached photographs). The ground cover, straw wattles, and sediment fence have stabilized the side-slopes. Russian thistle is not a noxious weed and can be effectively managed. These weedy species are being currently managed (mowed) and we will make efforts to eliminate them prior to the seeding activities in the spring.

To date, we have not undertaken formal monitoring efforts due to the delays in our seeding efforts, but will be conducted in August to evaluate the natural re-vegetation of the restored wetland and adjacent side-slopes.

Please call me at 601-985-4447 or Greg Meyer of Carlson McCain at 701-595-7004 if you have any questions or need additional information.

Sincerely,

BUTLER SNOW LLP



John A. Brunini

Attachments: Photographs

cc: Monica Heimdal
Greg Meyer
Kyle Brock

Post Office Box 6010
Ridgeland, MS 39158-6010

JOHN A. BRUNINI
601-985-4447
john.brunini@butlersnow.com

Suite 1400
1020 Highland Colony Parkway
Ridgeland, MS 39157

T 601.948.5711 · F 601.985.4500 · www.butlersnow.com

BUTLER SNOW LLP



Photograph 1 View of restored wetland area facing north from the adjacent side-slope. The wetland area is being naturally re-vegetated by seeds from the adjacent wetland areas. The erosion control structures are evident in the photograph and these include the orange sediment fence and straw wattles along the side-slopes. These were installed during the fall of 2013. Russian thistle and other weed species have become established on the side-slopes of the restored wetlands. The weedy vegetation is being managed (mowed) and will help with erosion control until the sides-slopes are seeded with the native species seed mixture next spring (2015).



Photograph 2. View of western end of restored wetland area. A distinct line of vegetation indicates the impacted area.



Photograph 3. View of western end of the restored wetland area.



Photograph 4. View of restored wetland area and side-slopes facing west. Small areas of inundation were present in the wetland at the time the photograph was taken.



Photograph 5. View of side-slopes facing east.

Kato, Linda

From: John Brunini <Johnny.Brunini@butlersnow.com>
Sent: Monday, August 04, 2014 1:32 PM
To: Kato, Linda
Cc: Heimdal, Monica; 'Kyle Brock'; Greg Meyer
Subject: Williston Village Mobile Home Park - Wetland Restoration Update
Attachments: Letter to Linda Kato enclosing photographs.PDF

Ms. Kato,

I hope this email finds you well. Attached please find electronic copies of a letter and photographs in the referenced matter. I am sending you a hardcopy by mail today. Once you have had an opportunity to review the attached, please let me know if you have any questions. Please also note that my contact information has changed since we last exchanged emails and telephone calls.

Thanks,
JB

John A. Brunini
Butler Snow LLP
Direct: (601) 985-4447
Fax: (601) 985-4500
John.Brunini@butlersnow.com

BUTLER | SNOW

[About Butler Snow](#)

[Bio](#)

[V-Card](#)

P.O. Box 6010
Ridgeland, MS 39158-6010

Suite 1400
1020 Highland Colony Parkway
Ridgeland, MS 39157

CONFIDENTIALITY NOTE: This e-mail and any attachments may be confidential and protected by legal privilege. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the e-mail or any attachment is prohibited. If you have received this e-mail in error, please notify us immediately by replying to the sender and deleting this copy and the reply from your system. Thank you for your cooperation.

BUTLER | SNOW

August 4, 2014

Ms. Linda Kato
US Environmental Protection Agency – Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Williston Village Mobile Home Park Wetland Restoration
Docket No. CWA-08-2013-0032

Dear Ms. Kato,

Please consider this letter as an update of activities concerning the restoration of the wetland within the Williston Village Mobile Home Park, Docket No. CWA-08-2013-0032.

Restoration activities including restoration of the wetland, final grading of the wetland side-slopes, and implementation of erosion control structures (silt fence and straw wattles) was completed in early November 2013. The final step of the wetland restoration activities included removing the last of the fill materials which allowed the wetland to be flooded with water that had been previously backed-up by those materials. This was completed last fall before the restored wetland area was unable to be seeded due to cold temperatures and the unavailability of appropriate seed. The extreme cold winter and spring, dry summer, and the continued unavailability of the appropriate seed has resulted in our inability to seed the wetland area yet. However, the site is naturally re-vegetating itself as seen in the attached photographs.

According to our environmental consultants on this project, Carlson McCain, Inc., natural re-vegetation of restored wetland areas is to be expected and Carlson McCain has encountered this circumstance with numerous U.S. Army Corps of Engineers wetland mitigation projects. In fact, according to Carlson McCain, most of its wetland mitigation projects do not call for seeding a restored wetland area, but rather allow for natural re-vegetation. Further complicating our efforts on this project is our continued inability to locate seed mixes of the three primary species found in the adjacent wetland areas: Nuttall's alkaligrass (*Puccinellia nuttalliana*), foxtail barley (*Hordeum jubatum*), or inland saltgrass (*Distichlis spicata*). The only alkaligrass seed available is Fultz alkaligrass, but it is an introduced species and Carlson McCain has advised that we not seed it in the wetland area as it could spread into Camp Creek.

Post Office Box 6010
Ridgeland, MS 39158-6010

JOHN A. BRUNINI
601-985-4447
john.brunini@butlersnow.com

Suite 1400
1020 Highland Colony Parkway
Ridgeland, MS 39157

T 601.948.5711 • F 601.985.4500 • www.butlersnow.com

BUTLER SNOW LLP

BUTLER | SNOW

At this time, we believe that seeding the restored wetland area will be unnecessary as it will re-vegetate naturally from the adjacent wetland areas. If EPA disagrees and believes that seeding the wetland area is necessary, prairie cordgrass (*Spartina pectinata*), would be a good candidate species. Prairie cordgrass is a common wetland species of the geographic area, can handle high concentrations of salinity (present in the wetland area), and is prevalent upstream of the project.

The side-slopes in the restored area have also not been seeded due to the extreme winter and spring and dry summer. Conditions remained unfavorable during the entire period of specified planting dates for the appropriate seed mixes, so we have decided to wait until next spring (per the dates listed in the restoration plan) in order to aid the success of the seeding effort. The side slopes at the site will be hydro-seeded next spring (2015) during the appropriate dates. Weedy vegetation, primarily Russian thistle (*Salsola kali*), has flourished along the side-slopes and is currently providing ground cover that aids in erosion control (see attached photographs). The ground cover, straw wattles, and sediment fence have stabilized the side-slopes. Russian thistle is not a noxious weed and can be effectively managed. These weedy species are being currently managed (mowed) and we will make efforts to eliminate them prior to the seeding activities in the spring.

To date, we have not undertaken formal monitoring efforts due to the delays in our seeding efforts, but will be conducted in August to evaluate the natural re-vegetation of the restored wetland and adjacent side-slopes.

Please call me at 601-985-4447 or Greg Meyer of Carlson McCain at 701-595-7004 if you have any questions or need additional information.

Sincerely,

BUTLER SNOW LLP



John A. Brunini

Attachments: Photographs

cc: Monica Heimdal
Greg Meyer
Kyle Brock

Post Office Box 6010
Ridgeland, MS 39158-6010

JOHN A. BRUNINI
601-985-4447
john.brunini@butlersnow.com

Suite 1400
1020 Highland Colony Parkway
Ridgeland, MS 39157

T 601.948.5711 • F 601.985.4500 • www.butlersnow.com

BUTLER SNOW LLP



Photograph 1 View of restored wetland area facing north from the adjacent side-slope. The wetland area is being naturally re-vegetated by seeds from the adjacent wetland areas. The erosion control structures are evident in the photograph and these include the orange sediment fence and straw wattles along the side-slopes. These were installed during the fall of 2013. Russian thistle and other weed species have become established on the side-slopes of the restored wetlands. The weedy vegetation is being managed (mowed) and will help with erosion control until the sides-slopes are seeded with the native species seed mixture next spring (2015).



Photograph 2. View of western end of restored wetland area. A distinct line of vegetation indicates the impacted area.



Photograph 3. View of western end of the restored wetland area.



Photograph 4. View of restored wetland area and side-slopes facing west. Small areas of inundation were present in the wetland at the time the photograph was taken.



Photograph 5. View of side-slopes facing east.

Kato, Linda

From: Kato, Linda
Sent: Thursday, October 17, 2013 12:33 PM
To: John Brunini
Subject: RE: Emailing: Nationwide Permit 32 (01646773).PDF

Thanks John. I'm just glad we got it all accomplished before the shutdown.

Linda S. Kato
Enforcement Counsel
U.S. EPA Region 8
Mail Code ENF-L
1595 Wynkoop
Denver, CO 80202
(303) 312-6852
kato.linda@epa.gov

From: John Brunini [mailto:jbrunini@brunini.com]
Sent: Friday, October 04, 2013 12:20 PM
To: Kato, Linda; Heimdal, Monica
Cc: kb@geomap.tv
Subject: Emailing: Nationwide Permit 32 (01646773).PDF

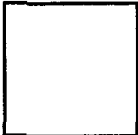
Linda and Monica,

Attached to this email, please find a copy of Nationwide Permit 32, recently issued to BIP 40, LLC by the Corps of Engineers. As you know, NWP 32 serves as the Corps' authorization of the restoration work required by our AOC with EPA. If you have any questions regarding this matter, please feel free to contact me. And thank you again for all of your cooperation and assistance in this matter.

Thanks,
JB

John A. Brunini

E: jbrunini@brunini.com
P: 601-973-8712 F: 601-960-6902



The Pinnacle Building
190 East Capitol St, Suite 100, Jackson, MS 39201
Post Office Drawer 119, Jackson, MS 39205

www.brunini.com
[Bio / V-Card](#)

Confidentiality Statement

The information contained in this electronic message from the law firm of Brunini, Grantham, Grower & Hewes, PLLC is confidential or privileged. The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use

of the contents of this message is prohibited. If you have received this electronic message in error, please notify us immediately by telephone at (601) 948-3101.

IRS Circular 230 Notice

To ensure compliance with requirements imposed by the IRS, we inform you that, unless specifically indicated otherwise, any tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code, or (ii) promoting, marketing, or recommending to another party any tax-related matter addressed herein.

Kato, Linda

From: Kato, Linda
Sent: Tuesday, September 24, 2013 12:28 PM
To: John Brunini
Cc: Heimdal, Monica
Subject: RE: Restoration Plan and Contact (UNCLASSIFIED)

Hi John - I'm still hopeful it will be filed today - Monica and I have made it a priority. I will email you as soon as I can.

Linda S. Kato
Enforcement Counsel
U.S. EPA Region 8
Mail Code ENF-L
1595 Wynkoop
Denver, CO 80202
(303) 312-6852
kato.linda@epa.gov

-----Original Message-----

From: John Brunini [mailto:jbrunini@brunini.com]
Sent: Tuesday, September 24, 2013 12:23 PM
To: Kato, Linda
Subject: RE: Restoration Plan and Contact (UNCLASSIFIED)

Linda,

Just checking in to see whether the AOC has been filed yet. BIP 40 has contractors lined up and ready to mobilize on this project once we receive the executed and filed AOC. Thank you again for all of your assistance and patience on this matter.

Thanks,
JB

-----Original Message-----

From: Kato, Linda [mailto:Kato.Linda@epa.gov]
Sent: Monday, September 23, 2013 2:42 PM
To: John Brunini; 'Cimarosti, Daniel E NWO'
Cc: Mikulecky, Matthew J NWO; Heimdal, Monica; Crooke, Patsy J NWO; kb@geomap.tv; Chris Hughes (chh222@gmail.com)
Subject: RE: Restoration Plan and Contact (UNCLASSIFIED)

John - I anticipate that we will file the AOC late this afternoon or tomorrow morning. I will send you a PDF of the final after it is filed and we get a docket number. Would you like the original signed version to be sent to you or to Mr. Haugen?

Linda S. Kato
Enforcement Counsel
U.S. EPA Region 8
Mail Code ENF-L
1595 Wynkoop

Denver, CO 80202
(303) 312-6852
kato.linda@epa.gov

-----Original Message-----

From: John Brunini [mailto:jbrunini@brunini.com]

Sent: Friday, September 20, 2013 9:29 AM

To: 'Cimarosti, Daniel E NWO'

Cc: Mikulecky, Matthew J NWO; Heimdal, Monica; Crooke, Patsy J NWO; kb@geomap.tv; Kato, Linda; Chris Hughes (chh222@gmail.com)

Subject: RE: Restoration Plan and Contact (UNCLASSIFIED)

Dan and Matt,

Thank you both very much for your time this morning. Attached to this email, please find three items.

1. The first attachment is a copy of an email received from EPA Region 8 Attorney Linda Kato dated yesterday confirming that EPA has approved BIP 40's restoration plan and is awaiting receipt from BIP 40 of the final Administrative Order on Consent.
2. The second attachment is a copy of BIP 40's final restoration plan which has been approved by EPA Region 8.
3. The last item is a copy (at this point executed only by BIP 40) of the final Administrative Order on Consent for which we are awaiting EPA signature. We believe EPA will receive the original executed by BIP 40 via FedEx today.

As we discussed this morning, once I receive a final, fully executed version of the Administrative Order on Consent, I will send you a copy by email and give you a call. As Ms. Kato states in her email of yesterday, we anticipate this to occur early next week. Once I provide that to you and call you, I understand that you will provide verbal authorization for BIP 40 to proceed with the restoration activities under NWP 32 and you will follow that verbal authorization with a written authorization to proceed.

Dan and Matt, thank you both very much for your cooperation and assistance in this matter. If you have any problems opening the attachments or any questions regarding this matter, please feel free to call me. Thanks again.

JB

John A. Brunini
E: mailto:jbrunini@brunini.com

P: 601-973-8712 F: 601-960-6902

Brunini, Grantham, Grower & Hewes, PLLC

The Pinnacle Building

190 East Capitol St, Suite 100, Jackson, MS 39201 Post Office Drawer 119, Jackson, MS 39205

Confidentiality Statement

The information contained in this electronic message from the law firm of Brunini, Grantham, Grower & Hewes, PLLC is confidential or privileged. The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify us immediately by telephone at (601) 948-3101.

IRS Circular 230 Notice

To ensure compliance with requirements imposed by the IRS, we inform you that, unless specifically indicated otherwise, any tax advice contained in this communication (including any attachments) was not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code, or (ii) promoting, marketing, or recommending to another party any tax-related matter addressed herein.

-----Original Message-----

From: Cimarosti, Daniel E NWO [mailto:Daniel.E.Cimarosti@usace.army.mil]

Sent: Friday, September 20, 2013 7:49 AM

To: John Brunini

Cc: Mikulecky, Matthew J NWO; Heimdal, Monica; Crooke, Patsy J NWO

Subject: Restoration Plan and Contact (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Mr. Brunini,

As we discussed, if I am out of the office please contact Matt Mikulecky for confirmation of NWP 32 once EPA determines compliance with their order.

Classification: UNCLASSIFIED

Caveats: NONE